

**The Tennessee Commission on
Education Recovery and Innovation**



**Year Three Report
A Vision for the Future of Education in Tennessee**

June 30, 2022

Commissioners: Dr. Marie Chisholm-Burns; Todd Dickson; Dolores Gresham; Dr. Youlanda Jones; Dr. Robert Christopher Jones; Frank Rothermel; Glenn Swift; Dr. Joey Vaughn, vice chair; Tara Scarlett, chair

Table of Contents

Legal Authority	3
Executive Summary	4
How to Read and Use This Report	5
List of Priorities, Corresponding Recommendations, and Aligned Success Metric(s)	6
Measuring Success for Tennesseans	13
Recommendations for Transforming Education in Tennessee	15
Close Educational Gaps Exacerbated by COVID-19	15
Priority: Ensure students master literacy and numeracy skills	15
Priority: Address learning remediation and acceleration needs.	16
Priority: Strengthen, retain, expand, and diversify the state's education professionals	17
Priority: Equip schools and districts to address students' well-being	18
Modernize Tennessee's Education System for the Future	19
Priority: Optimize capacity for flexible, high-quality school options	19
Priority: Streamline postsecondary systems to facilitate lifelong learning	24
Priority: Strengthen alignment across the k-12, postsecondary, and workforce systems	25
Priority: Incentivize locally led innovation	26
Conclusion	27
Acknowledgments	29
Glossary of Terms and Acronyms	30
Endnotes	39

Commented [PB1]: Note: We will update the table of contents once the report is completed, approved by the Commission, and professionally copyedited

Legal Authority

On June 17, 2020, the House of Representatives joined their Senate colleagues in unanimously passing Senate Bill 1974, thereby creating the nine-member Tennessee Commission on Education Recovery and Innovation (ERIC) to examine short- and long-term systemic effects on the state's educational systems of the COVID-19 pandemic and natural disasters of 2020. This act later became Public Chapter 792, which recognized in law that the pandemic will likely affect students for the next 12 years and charged the new Commission to do the following:

"Advise and make recommendations to the General Assembly, the state board of education, the department of education, the Tennessee Higher Education Commission, and the state institutions of higher education on strategies to close educational gaps resulting from school closures, and to modernize the state's educational structure from kindergarten to career to create more flexibility in the delivery of education to students."

The Commission's work involves three deliverable reports as detailed in the law:

"The Commission shall submit an [initial assessment](#) of the effect the COVID-19 pandemic has had on Tennessee's educational systems to the General Assembly no later than January 1, 2021. The Commission shall submit [a report](#) on the Commission's actions, findings, and recommendations to the General Assembly no later than January 1, 2022 and shall submit a final report on the Commission's actions, findings, and recommendations to the General Assembly no later than June 30, 2022."

This report, the third of three, is required by the statute and is designed to detail the Commission's actions, findings, and recommendations to the General Assembly.

Executive Summary

There is a hard truth that Tennessee leaders must grapple with: most students in the state are not receiving the education they need to thrive academically or meet the needs of employers in a dynamic state economy. At the most basic level, many students experience poor academic outcomes in reading, math, and postsecondary readiness. There is a mental health crisis among students made worse by a lack of robust support for well-being in schools. Many of our k-12 and postsecondary education systems are better suited for the 20th century economy than the 21st, especially when it comes to technology and evolving workforce needs. All of these challenges existed long before 2020, but the COVID-19 pandemic and several catastrophic natural disasters in recent years greatly exacerbated them.

Tennessee's Education Innovation and Recovery Commission (ERIC) envisions a different future, a future *where every Tennessean will have high-quality education necessary for life.*

ERIC was tasked with addressing both the short- and long-term effects of the pandemic and the need to modernize an outdated education system. The Commission met over two years, reviewed hundreds of pages of research and information on a wide range of topics, and heard from dozens of experts from across Tennessee and the nation (see the next page for a more detailed description of the Commission's work).

From this work, the Commission developed 83 recommendations across nine priority areas. These priorities collectively address the impacts of the pandemic, close education gaps, and create a more flexible and responsive educational system from kindergarten through to career:

- Ensure students master literacy and numeracy skills.
- Address learning **remediation** and acceleration needs.
- Strengthen, retain, expand, and diversify the state's education professionals.
- Equip schools and districts to address students' well-being.
- Optimize capacity for flexible, high-quality school options.
- Redesign high school to ensure students have access to flexible pathways to college and career.
- Streamline postsecondary systems to facilitate lifelong learning.
- Strengthen alignment across the k-12, postsecondary, and workforce systems.
- Incentivize locally led innovation.

The Commission also developed 11 success metrics, aligned to each priority area, that when achieved will demonstrate that the Commission's vision is substantially realized. Success, however, will only be fully realized for Tennessee if all students experience the benefits of education policy change. The state's most marginalized students, including Black students, Hispanic students, economically disadvantaged students, **English language learners**, and students with disabilities, experienced the worst outcomes prior to the pandemic and were hit hardest in its aftermath. A key measure of success is whether Tennessee can dramatically improve outcomes for these students in the coming years.

Tennessee legislators made progress in enacting many of the Commission's recommendations and other important legislation during the 2022 session, but their work is far from done. Lawmakers must build on this momentum and return to the next legislative session with a renewed sense of urgency. Only aggressive and sustained action will fully address the impacts of the pandemic and create the educational opportunities that we all want for Tennesseans.

Commented [PB2]: Chris Jones feedback: Change to "Tennesseans."

No revision: The commission has previously discussed how this report is targeted to the specific leaders responsible for this work and is designed to be aspirational.

Commented [3]: Chris Jones feedback: is this true? "most?"

June 10 discussion.

Commented [LG4]: Tara Scarlett feedback: change "K-12" to "k-12" per education department input.

Revision made throughout document.

Commented [PB5]: Chris Jones feedback: Do we need to be specific? I think it runs the risk of missing groups on the one hand or over-generalizing on the other.

Todd Dickson feedback: change "Black students, Hispanic students" to "students of color" to represent the diversity of the student population

June 10 discussion.

Proposed revision: "The state's most marginalized students, including students of color, economically disadvantaged students, English language learners, and students with disabilities, experienced the worst outcomes prior to the pandemic and were hit hardest in its aftermath."

How to Read and Use This Report

This is the Commission's third and final report. The [Year 1 report](#) and its [addendum](#) examined the short- and long-term systemic effects on the state's educational systems resulting from the COVID-19 pandemic and natural disasters of 2020. The [Year 2 report](#) detailed the Commission's actions, findings, and recommendations to the General Assembly as of December 2021. This report contains the recommendations from the Year 2 report and is framed around the key findings from the Year 1 report. In addition, this report offers new recommendations and presents a set of metrics to measure the success of any adopted recommendations.

The Year 3 report is divided into two main sections. The first section describes what success will look like based on the vision set forth by this Commission and the recommendations the Commission developed to achieve this vision. The purpose of these success metrics is to demonstrate what can be achieved if the Commission's recommendations are adopted. [These metrics will help lawmakers understand if state investments are producing ambitious outcomes for all Tennesseans.](#) Individual districts, schools, and teachers are not responsible for achieving these outcomes, rather lawmakers and executive agencies tasked with adopting and implementing education policy are the entities ultimately accountable for achieving success for Tennesseans.

The second section describes priorities and recommendations aligned to the two charges outlined in the law establishing the Commission: (a) closing educational gaps resulting from school closures, and (b) modernizing the state's educational systems from kindergarten to career. Each sub-section begins with a brief overview of the priority area. This overview is followed by a table that includes all of the ERIC recommendations aligned to the priority area. Finally, each section concludes by describing any legislation enacted in 2022 aligned to the priority. The [Year 2 report](#) and [its appendix](#) provide more details on the importance of each priority area; a discussion of the relevant Tennessee laws, policies, programs, and initiatives; and research supporting each set of recommendations. Note, the appendix to the Year 2 report has been revised to include information related to recommendations newly added in this report.

The discussion of each priority and set of recommendations is written to stand alone. While the Commission believes all of the recommendations are important and combining them will offer the best chance of fully addressing the totality and complexity of the Commission's statutory charge, commissioners also recognize and acknowledge some of the recommendations will take more time than others and thus recommend the legislature take an intentional and nuanced approach to prioritizing and adopting the recommendations included to enable successful implementation. Successful implementation is the only path to fully realizing the potential positive impact for Tennesseans.

A few quick notes. First, there is a glossary on page [30](#) of this report where key terms and acronyms (**bolded the first time they appear in the report**) are defined. Second, the Commission recommends that any program created pursuant to this report should be evaluated for effectiveness after the fifth year of implementation. The [Year 2 report](#) and [its appendix](#) provide more information on how to interpret the evidence used to support the development of each recommendation. Finally, the Commission does not believe innovation should be prevented because promising practices are new and have not yet been studied, but that commitment to rigorously evaluating new programs and practices is an essential component of innovation. Investing in well-designed evaluation enables the state, education systems, and educators to scale what is working and to stop investing time and resources in what is not.

Commented [PB6]: Glenn Swift feedback: I still would like to see reference to our success metrics as guideposts to determine value of expenditures required to implement recommendations. The metrics are measures of "worth what's paid for."

June 10 discussion.

Proposed additional sentence: "These metrics will help lawmakers understand if state investments are producing ambitious outcomes for all Tennesseans."

Commented [7]: Dolores Gresham feedback paraphrased: If I'm a legislator, I would stop reading here. This should emphasize how lawmakers, state officials, and educators all share accountability in achieving positive outcomes for students. There also needs to be an emphasis on ensuring the recommendations are implemented with fidelity and integrity.

June 10 discussion.

Proposed revision: "Legislators, executive agencies, and individual districts, schools, and teachers all share accountability in achieving success for Tennesseans. Legislators are tasked with passing laws aligned to ERIC's recommendations while executive agencies are responsible for adopting corresponding regulations and supporting successful implementation in schools. Individual districts, schools, and teachers are responsible for student outcomes."

Deleted: that

Deleted: that

Deleted: it is important to note that

Deleted: that

List of Priorities, Corresponding Recommendations, and Aligned Success Metric(s)

Priority	Recommendations	Success Metric(s)
Ensure students master literacy and numeracy skills.	<ol style="list-style-type: none"> 1. Ensure recently enhanced and existing early literacy programs maintain financial viability, oversight, and accountability. 2. Establish rigorous and periodic evaluation of early literacy programs by independent evaluators (such as the Office of Research and Education Accountability [OREA]), and make those results public. 3. Create evidence-based professional development programs for teachers and leaders to improve math teaching and learning in order to respond to pandemic-related unmet learning, particularly for vulnerable populations. 4. Establish evidence-based curriculum recommendations for early numeracy. 5. Fund Tennessee's k-12 system and focus funding in the classroom on literacy and math initiatives, ensuring, through rigorous external evaluation and public reporting, that those dollars are resulting in significantly improved student literacy and math achievement. 	By 2030, Tennessee will move to the top 15 on National Assessment of Educational Progress (NAEP) fourth-grade reading proficiency and eighth-grade mathematics, with no gaps across race/ethnicity, income, disability, status as an English learner, or geographic locale.
Address learning remediation and acceleration needs.	<ol style="list-style-type: none"> 6. Expand long-term funding for tutoring programs designed in alignment with research-supported best practices to address known gaps in literacy and math. 7. Expand access to, and continue in the long term (including by providing long-term state funding), programs created by recent legislation (e.g., bridge camps, after-school learning mini-camps, and summer learning camps) that are demonstrating effectiveness at accelerating student learning. 8. Support early interventions and research-based materials and instruction for k-12 students to minimize the need for postsecondary remediation. 9. Create an early warning data system (EWDS) and corresponding interventions, ensuring integration across existing data systems and equal access and support (including funding) for implementation across districts. 10. Establish metrics to track and periodically report on student remediation and acceleration and ensure those data are used to inform classroom practice. 	The percentage of first-time freshmen attending community colleges needing remediation in one or more subjects will decrease from 55% in 2020 to 28% by 2030.

Strengthen, retain, expand, and diversify the state's education professionals.	<ul style="list-style-type: none"> 11. Strengthen the classroom-based clinical practice for all teacher candidates across all preparation pathways to include components of high-quality, research-based clinical experiences. 12. Strengthen the curriculum in educator preparation programs for both teachers and leaders to ensure they have the knowledge and skills to meet students' diverse academic and well-being needs. 13. Create or expand high-quality, research-based, state-facilitated professional development opportunities to support teachers in using data to inform their instruction and meet the needs of individual students. 14. Increase educator compensation with the intent of elevating the profession and increasing competitiveness in Tennessee's educator labor market. 15. Expand and strengthen the existing Minority Teaching Fellows Program. 16. Provide technical assistance to districts, in particular rural districts, to establish partnerships with local educator preparation programs to create local Grow Your Own (GYO) programs. 17. Create a strong evaluation plan for Grow Your Own programs to ensure these programs result in high-quality educators being placed in Tennessee's classrooms. 18. Incentivize postsecondary institutions to work with their partner districts to cultivate new teacher pipeline programs. 19. Create new state-operated financial incentive programs for highly effective teachers and leaders. 20. NEW: Increase curriculum-based professional development to support implementation of new materials. 21. NEW: Reinstate statewide financial support for hiring and retention bonuses for teachers in hard-to-staff positions and low-performing schools. 22. NEW: Direct the Tennessee Department of Education (TDOE), Tennessee Higher Education Commission (THEC), and Student Assistance Corporation to better communicate loan forgiveness and fellowship opportunities on their websites. 23. NEW: Update the data collection process and guidance around differentiated pay. 24. NEW: Increase alternatives for retirement options for educators. 	<p>By 2030, Tennessee will provide the majority of students with effective teachers. Each district's evaluation composite will reflect an overall effectiveness level of 3, 4, or 5.</p> <p>By 2030, at the district level, the percentage of educators who identify as people of color will be no more than 5% below the percentage of students who identify as people of color.</p>
Equip schools and districts to address	<ul style="list-style-type: none"> 25. Incentivize the expansion of existing, and the development of new, high-quality programs to support students' well-being. 26. Provide professional development to equip all staff to recognize students' well-being needs, especially adverse childhood experiences (ACEs), and know when and where to refer students for more support. 	<p>By 2030, all schools will have a chronic absenteeism rate of less than 10% with no significant</p>

students' well-being.	<p>27. Fully fund school-based nurses, counselors, and social workers in line with Basic Education Program Review Committee 2021 recommendations.</p> <p>28. Incentivize partnerships between education systems and existing mental and behavioral support systems to help educators and community members understand and leverage existing resources.</p>	gaps by student subgroups.
Optimize capacity for flexible, high-quality school options.	<p>29. Rigorously evaluate and hold current statewide internet infrastructure initiatives and future investments accountable to ensure goals and outcomes are met.</p> <p>30. Incentivize the coordination and innovation of universal broadband access.</p> <p>31. Require districts to maintain infrastructure, including devices, integrated technology platforms, and connectivity solutions, to seamlessly transition modes of instruction, and provide ongoing support and state funding.</p> <p>32. Require periodic virtual “drills” both to ensure schools, students, and families can move seamlessly between virtual and in-person delivery modes and to identify and address infrastructure-related challenges.</p> <p>33. Hold online schools receiving public funding accountable through existing school accountability structures.</p> <p>34. Enjoin educator preparation programs to incorporate best practices for multiple modes of delivery, including remote instruction, into their instruction and field experiences for all teachers.</p> <p>35. Provide ongoing professional development to k-12 educators to develop and strengthen remote instruction skills.</p> <p>36. Require that all curricula purchased by districts have an integrated technology-based capability and that districts establish and/or maintain the infrastructure and training required to fully leverage curricular resources across modes, allowing districts to seamlessly switch between delivery modes as necessary.</p> <p>37. Clarify how enrollment, admissions, and financial aid policies classify graduates of virtual schools, then communicate with students and families about the impact attending a virtual school has on eligibility and access.</p> <p>38. NEW: Develop common definitions of high-quality k-12 curriculum and objective rubrics to evaluate materials.</p> <p>39. NEW: Encourage districts to use the highest-rated k-12 curriculum materials</p> <p>40. NEW: Change current law to prioritize admittance for low-income students seeking open enrollment.</p> <p>41. NEW: Explore models that could enable the provision of transportation to students.</p> <p>42. NEW: Establish common open enrollment windows and application processes for all</p>	By 2025, 100% of students will have access to a device (other than a cell phone) that is connected to high-speed internet.

	<p>schools and districts, and move toward common enrollment systems at the district level by 2030.</p> <p>43. NEW: Fund established charter school facilities on a per-student basis at an equitable level relative to other types of public schools located within the same school district.</p> <p>44. NEW: Strengthen charter school accountability by requiring charter school contracts to specify authorizer roles, powers, and responsibilities.</p> <p>45. NEW: Consider amending Tennessee's current homeschool/microschool/learning pod law to protect at-risk students by requiring providers contracted by parents to complete background checks and providing a system that flags providers with a history of abuse and/or neglect.</p> <p>46. NEW: Require OREA to study Tennessee's homeschool, microschools, and learning pods current landscape. For each, evaluate current status and standards, and assess implications of these trends on postsecondary participation.</p> <p>47. NEW: Ask the TDOE to initiate a study to determine (a) which student populations (e.g., special education, English learners, students with disabilities) lack access to supplemental learning options, (b) what supplemental learning options are effective, and (c) an assessment of schools and parents representing those student groups to determine what program design features would best enable access.</p> <p>48. NEW: In public accountability reporting (school report cards, websites, etc.), include additional contextual information related to school quality and success, including well-being. Examples of other potential indicators include suspension or expulsion rates; ratings of school safety; access to effective career guidance and counseling; or teacher and school leader attrition, retention, and mobility.</p>	
<p>Redesign high school to ensure students have access to flexible pathways to college and career.</p>	<p>49. Evolve all districts to offer multiple pathways toward postsecondary credentials and degrees, including through industry certification programs, microcredentials, Tennessee Colleges of Applied Technology (TCATs), community colleges, four-year institutions, and other opportunities, with integration to allow students to move among pathways if one isn't a good fit, and evolve funding streams to mitigate disincentives for k-12 and postsecondary systems to enable flexibility for students.</p> <p>50. Ensure every high school student has the opportunity to attend a TCAT or to substantively complete sufficient early postsecondary coursework toward an institution or industry credential while in high school.</p> <p>51. Fully fund dual enrollment courses for high school juniors and seniors and expand dual enrollment courses to include qualified freshmen and sophomores.</p> <p>52. Require districts and provide funding to support students in accessing a meaningful</p>	<p>By 2030, the percentage of high schoolers that demonstrate readiness for college and careers on Tennessee's Ready Graduate indicator will double from 41% to 82%, with no gaps by race/ethnicity,</p>

	<p>senior-year capstone experience such as an apprenticeship, a co-op, an internship, or another industry- or work-based learning (WBL) experience, including opportunities to earn both course credit and wages.</p> <p>53. Move to an hours-per-year minimum to give districts flexibility over their calendars, with some guardrails to ensure districts maximize quality instructional time for students.</p> <p>54. Expand opportunities for students to demonstrate proficiency at their own pace:</p> <ul style="list-style-type: none"> ○ Create a high school equivalent to the College Level Examination Program (CLEP) test to allow students to show proficiency in subjects at the secondary level for the necessary credits while altering the Basic Education Program to eliminate disincentives for districts for early graduation. ○ Conduct research to identify challenges with the Move on When Ready Act and develop and implement a plan to strengthen it. ○ Leverage best practices from the Governor's Investment in Vocational Education (GIVE) Act to create scalable work-based learning and apprenticeship models statewide. <p>55. Pilot competency-based delivery models in high school to identify existing models and scalable best practices.</p> <p>56. Incentivize the expansion of existing mentoring programs to support students in exploring and aligning their career goals and postsecondary pathways.</p> <p>57. NEW: Adopt and implement a program in collaboration with industry and TCATs that includes career and postsecondary planning and operates after school, during the summer, or during school breaks.</p> <p>58. NEW: Partner with nonprofit organizations to provide postsecondary transition services to students.</p> <p>59. NEW: Strengthen the individualized learning plan <u>(not to be confused with an individual educational program or IEP)</u> process to include deliberate postsecondary and career planning aspects beginning no later than sixth grade.</p>	<p>income, disability, status as an English learner, or geographic locale.</p>
<p>Streamline postsecondary systems to facilitate lifelong learning.</p>	<p>60. Develop scalable, nonlinear credentialing pathways across TCAT, community college, and university pathways, including on- and off-ramps that are not fixed in a perceived order based on credential type.</p> <p>61. Create an automatic dual admissions option for students entering two-year institutions that are partnering with four-year institutions to facilitate seamless transfer and degree alignment.</p> <p>62. Conduct a full assessment and redesign of Tennessee Transfer Pathways, including clarification of which pathways transfer automatically between institutions without</p>	<p>By 2025, 55% of Tennesseans over age 24 will hold a postsecondary degree or certificate.</p>

	<p>additional requirements or conditions (beyond earning a passing grade in coursework) and those that have additional requirements or conditions attached to transferability, and incentivize four-year institutions to partner with two-year institutions and TCATs in order to advance Transfer Pathways.</p> <p>63. Expand the reach of TN Reconnect to accommodate additional alternative pathways and to reduce the eligibility gap between HOPE/TN Promise aid for traditional students and programs for independent adult learners.</p> <p>64. Expand reverse articulation to include alternative credential pathways.</p> <p>65. Incentivize students to take 15 credit hours per semester rather than 12 to improve on-time completion.</p> <p>66. Pilot competency-based delivery models in higher education to identify existing models and scalable best practices.</p> <p>67. Conduct a full assessment of the state's financial aid portfolio for alignment with best practices, consistency across programs, and alignment with other state goals and initiatives.</p> <p>68. Create a state grant program to incentivize multistakeholder, multifocused initiatives and policies designed to address students' non-tuition-based needs, such as textbook and inclusive access fees, nontuition fees (auxiliary costs), and other success-inhibiting costs.</p> <p>69. Create a pilot program at a set of community colleges to test the success of alternative scheduling, such as block scheduling or year-round scheduling, in meeting the needs of nontraditional students.</p> <p>70. Develop a comprehensive advising/mentoring initiative not tied explicitly to subpopulations of financial aid recipients.</p> <p>71. Task THEC with developing a workforce-responsive degree program and academic program approval policies at postsecondary institutions.</p> <p>72. Incentivize postsecondary institutions to track the number of degrees leading to jobs in a related field.</p> <p>73. NEW: Recommend a review of TBR and state university system hybrid programs and courses to determine which institutions are offering them, evaluate their value to students and faculty, and identify how the state can best support hybrid learning.</p> <p>74. NEW: Assess previous partnerships between hybrid learning providers and University of Tennessee programs to evaluate how those hybrid programs or courses were received by students, and what lessons could be learned.</p> <p>75. NEW: Identify an established hybrid education online provider to develop a pilot program in partnership with one or more public Tennessee universities and/or colleges, ideally in a high-demand career area.</p>	<p>By 2030, 60% of Tennesseans over age 24 will hold a postsecondary degree or certificate.</p>
--	--	---

Strengthen alignment across the k-12, post-secondary, and workforce systems.	<p>76. Improve access to and use of the existing P20 Data System, while protecting privacy.</p> <p>77. Align incentives across k-12 and postsecondary public funding systems to encourage systems to collaborate, prioritize flexibility for students, maximize student success, and minimize the cost and time to degrees and industry certificates employers are seeking, and remove disincentives for school districts to support students in accelerating high school completion.</p> <p>78. Incentivize the expansion of high-quality mentoring programs systemwide to support efforts related to student well-being, high school progression, and success in postsecondary education.</p> <p>79. NEW: Strongly encourage institutions to offer a semester-long or year-long “first year experience-” type course or program to support students as they transition to postsecondary and career.</p> <p>80. NEW: Require THEC, TDOE, and the Department of Labor and Workforce Development to align work related to non-degree credentials to avoid duplicating efforts and to ensure youth and adults seeking quality non-degree credentials receive consistent information.</p> <p>81. NEW: Ensure the agencies tasked with tracking non-degree credentials are collecting and publishing adequate data including industry trends, outcomes, and individual demographics.</p> <p>82. NEW: Ensure the agencies tasked with overseeing non-degree credentials develop partnerships with organizations outside of higher education that offer non-degree credentials to align those credentials with credentials recognized within postsecondary systems.</p>	By 2025, Tennessee’s k-12, postsecondary, and workforce systems will be aligned on which agency is accountable for each of the success metrics outlined by ERIC and will have a process in place to track progress towards each metric.
Incentivize locally led innovation.	<p>83. Create an innovation hub representing a partnership of education and industry organizations from the public, private, and nonprofit sectors.</p> <ul style="list-style-type: none"> ◦ NEW: This independent agency will have authority and accountability, and will interact with TDOE, THEC, and the Department of Labor and Workforce Development to focus on educational innovation across the kindergarten to career continuum. ◦ NEW: This work will include establishing grant opportunities to encourage entrepreneurs to innovate in support of student success (e.g., postsecondary transitions, early literacy and math). 	[placeholder]

Note: See the glossary at the end of this document for a definition of key terms and the appendix to the Year 2 report for more detail on these recommendations.

About the Education Recovery and Innovation Commission

Formed in June 2020, Tennessee's Education Recovery and Innovation Commission (ERIC) was asked "to examine short- and long-term systemic effects that the COVID-19 pandemic and natural disasters of 2020 have had on the state's educational systems." In particular, the Commission was asked to "advise and make recommendations to the general assembly, the state board of education, the department of education, the Tennessee higher education commission, and the state institutions of higher education on strategies to close educational gaps resulting from school closures, and to modernize the state's educational structure from kindergarten to career in order to create more flexibility in the delivery of education to students."

To guide its work, the ERIC commissioners articulated a vision for the state: ***Every Tennessean will have high-quality education necessary for life.*** In the context of a worldwide pandemic, the commission recognized the need to build on the state's commitment to education and move toward 21st century innovative ideas and practices that offer students the chance to learn, enter a career of their choice, and contribute economically and civically as citizens of the state.

The [Year 1](#) and [Year 2](#) reports describe the Commission's activities in its first two years. In **Year 3**, the Commission met four times, heard from three more organizations (Propel America, ExcelinEd, Western Governors University), and reviewed research on an additional eight topics:

- School accountability
- Secondary-postsecondary transition
- Educator Preparation Provider data and accountability
- Postsecondary course options
- Innovation
- Curriculum
- Teacher compensation and benefits
- School choice

The Commission also conducted an in-person site visit to West Creek High School in the Clarksville-Montgomery County School System and to Nashville State Community College's Clarksville campus, which included discussions with students, educators, and administrators. Finally, a small group of commissioners presented ERIC's recommendations directly to lawmakers in the Senate Education Committee and in the House Education Committee.

The Year 3 report represents the culmination of two full years of Commission activity, including several meetings, presentations, wide-ranging research, and expert testimony.

Measuring Success for Tennesseans

The success metrics in the table below are designed to show legislators what the Commission believes can be achieved if its recommendations are adopted and implemented with fidelity and integrity. The Commission does not envision that individual districts, schools, and teachers are accountable for achieving success on each of these metrics. Rather, Tennessee lawmakers are responsible for adopting policies that set the conditions and provide the tools and resources required to support success in schools, institutions, and communities across the state. With these tools in hand, state agencies in charge of implementation and support for these policies are ultimately accountable for results.

Deleted: well

Commented [LG8]: Dolores Gresham feedback: Work in shared accountability across the sector.

June 10 discussion.

Proposed revision: "The Commission does not envision individual districts, schools, and teachers can achieve success on each of these metrics by themselves. Rather, Tennessee lawmakers are responsible for adopting policies that set the conditions and provide the tools and resources required to support success in schools, institutions, and communities across the state. With these tools in hand, state agencies must implement these policies with fidelity and integrity."

Priority Area	Success Metric(s)
Ensure students master literacy and numeracy skills	<p>By 2030, Tennessee will move to the top 15 on National Assessment of Educational Progress (NAEP) fourth-grade reading proficiency and eighth-grade mathematics, with no gaps across race/ethnicity, income, disability, status as an English learner, or geographic locale.</p> <p>Baseline: Tennessee ranks 31st in 4th grade reading and 30th in 8th grade math on the most recent NAEP administration.¹</p>
Address learning remediation and acceleration needs	<p>The percentage of first-time freshmen attending community colleges needing remediation in one or more subjects will decrease from 55% in 2020² to 28% by 2030.</p>
Strengthen, retain, expand, and diversify the state's education professionals	<ul style="list-style-type: none"> By 2030, Tennessee will provide the majority of students with effective teachers. Each district's evaluation composite will reflect an overall effectiveness level of 3, 4, or 5. By 2030, at the district level, the percentage of educators who identify as people of color will be no more than 5% below the percentage of students who identify as people of color. <p>Baseline: In 2021, the percentage of educators statewide who identify as people of color was 13% while the corresponding percentage of students was 37%, creating a gap of 24 percentage points statewide.³</p>
Equip schools and districts to address students' well-being	<p>By 2030, all schools will have a chronic absenteeism rate of less than 10% with no significant gaps by student subgroups.</p> <p>Baseline: The chronic absenteeism rate for the entire state of Tennessee was 15.5% in 2020/2021.⁴</p>
Optimize capacity for flexible, high-quality school options	<p>By 2025, 100% of students will have access to a device (other than a cell phone) that is connected to high-speed internet.</p>
Redesign high school to ensure students have access to flexible pathways to college and career	<p>By 2030, the percentage of high schoolers that demonstrate readiness for college and careers on Tennessee's Ready Graduate indicator will double from 41% to 82%, with no gaps by race/ethnicity, income, disability, status as an English learner, or geographic locale.</p>
Streamline postsecondary systems to facilitate lifelong learning	<ul style="list-style-type: none"> By 2025, 55% of Tennesseans over age 24 will hold a postsecondary degree or certificate. By 2030, 60% of Tennesseans over age 24 will hold a postsecondary degree or certificate. <p>Baseline: 46.8% of Tennesseans aged 25-64 held a postsecondary credential in 2019.⁵</p>
Strengthen alignment across the k-12, postsecondary, and workforce systems	<p>By 2025, Tennessee's k-12, postsecondary, and workforce systems will be aligned on which agency is accountable for each of the success metrics outlined by ERIC and will have a process in place to track progress towards each metric.</p>
Incentivize locally led innovation	[placeholder]

Commented [PB9]: Todd Dickson feedback: Consider adding one or more additional metrics to this priority area.

June 10 discussion

Context: This particular area has a wide range of recommendations, including two Year 2 recommendations related to virtual drills and educator preparation for virtual instruction that have been adopted by 2022 legislation. In addition to Year 2 recommendations in this priority area, the commission has added new recommendations about high-quality curriculum, open enrollment, transportation, charter school authorizers and facilities, alternative school models (i.e., homeschools, microschools, learning pods), supplemental learning, and public school accountability reporting. Commissioners acknowledged that coming up with one metric to represent this entire priority area posed a challenge.

Proposed addition: By 2030, 80% of districts will adopt and implement high-quality curriculum in English language arts and mathematics.

Recommendations for Transforming Education in Tennessee

The Commission has identified nine priorities for the General Assembly (see page 4). The content of this section is organized under the following subsections: (1) the four priorities and associated recommendations designed to address the learning gaps exacerbated by the pandemic and other natural disasters that struck communities across Tennessee in 2020; and (2) the five priorities and associated recommendations that focus on modernizing Tennessee's education system from kindergarten to career to meet the state's evolving economic and workforce needs. The priorities and corresponding recommendations are organized thematically and are not ordered in regard to import or priority. Collectively, they are meant to serve as a roadmap for legislators to reimagine the state's education systems over the next decade. Finally, the recommendations in *italics* within each table below are those adopted by the Commission after the [Year 2 report](#) was published.

Close Educational Gaps Exacerbated by COVID-19

ERIC's [Year 1 report addendum](#) presented data that pre-pandemic, just 36% of students statewide met "On Track" or "Mastered" benchmarks across all grades and subjects, with considerable gaps among marginalized subgroups of students (i.e., Black students, Hispanic students, economically disadvantaged students, English language learners, and students with disabilities).⁶ The pandemic worsened this crisis, with just 31% of students across grade levels and subject areas reaching the "On Track" or "Mastered" benchmarks, a drop of 5 percentage points, with even fewer marginalized students scoring proficient or higher and more falling into the "Below" category.⁷ The Commission has identified four priorities designed to address the educational gaps exacerbated by the pandemic and to improve proficiency in numeracy and literacy for all students in Tennessee.

Priority: Ensure students master literacy and numeracy skills

Extensive research demonstrates that literacy and numeracy proficiency are core skills and essential predictors of educational success.⁸ For example, students who are not reading by third grade are four times more likely to drop out of high school than their peers who meet this milestone.⁹ Tennessee lawmakers have devoted considerable attention to early literacy, including the **Tennessee Literacy Success Act** passed in 2021. This progress on literacy is essential, but it is not enough. Math proficiency has not received the same level of attention from legislators. The following recommendations will build on important work already underway and help ensure students master the foundational literacy and numeracy skills they need for success in school, work, and life.

Priority	Recommendations	Success Metric(s)
Ensure students master literacy and numeracy skills.	<ol style="list-style-type: none">1. Ensure recently enhanced and existing early literacy programs maintain financial viability, oversight, and accountability.2. Establish rigorous and periodic evaluation of early literacy programs by independent evaluators (such as the OREA, and make those results public (see SB 2181).3. Create evidence-based professional development programs for teachers and leaders to improve math teaching and learning in order to respond to	By 2030, Tennessee will move to the top 15 on National Assessment of Educational Progress (NAEP) fourth-grade reading proficiency and eighth-grade

	<p>pandemic-related unmet learning, particularly for vulnerable populations.</p> <p>4. Establish evidence-based curriculum recommendations for early numeracy.</p> <p>5. Fund Tennessee's k-12 system and focus funding in the classroom on literacy and math initiatives, ensuring, through rigorous external evaluation and public reporting, that those dollars are resulting in significantly improved student literacy and math achievement.</p>	<p>mathematics, with no gaps across race/ethnicity, income, disability, status as an English learner, or geographic locale.</p>
--	---	---

Commented [PB10]: Chris Jones feedback: "Does this indicate increased funding?"

No revision: This is from the Year 2 report where commissioners decided that "fund" meant fully and adequately.

In the 2022 legislative session, the General Assembly made progress toward implementing these recommendations through the following action:

Bill Number	Bill Summary
SB 2181 (Pub. Ch. 975)	<p>TDOE must annually report data on reading instruction training provided in Educator Preparation Programs for K-3 teachers.</p> <p>Addresses recommendation #2</p>

Priority: Address learning remediation and acceleration needs.

Many students in Tennessee lack proficiency in grade-level subject matter despite graduating high school and transitioning into postsecondary institutions. For example, more than 55% of students in community colleges need remediation in reading, writing, and/or math, with more than one-third of students requiring remediation in all three subject areas.¹⁰ The [Year 2 report](#) describes the policies and initiatives already in place to address remediation in Tennessee's postsecondary institutions. However, Tennessee also needs to reduce the need for remediation in the first place. The Commission's recommendations under this priority are designed to do both.

Priority	Recommendations	Success Metric(s)
Address learning remediation and acceleration needs.	<p>6. Expand long-term funding for tutoring programs designed in alignment with research-supported best practices to address known gaps in literacy and math.</p> <p>7. Expand access to, and continue in the long term (including by providing long-term state funding), programs created by recent legislation (e.g., bridge camps, after-school learning mini-camps, and summer learning camps) that are demonstrating effectiveness at accelerating student learning.</p> <p>8. Support early interventions and research-based materials and instruction for k-12 students to minimize the need for postsecondary remediation.</p> <p>9. Create an early warning data system (EWDS) and corresponding interventions, ensuring integration</p>	<p>The percentage of first-time freshmen attending community colleges needing remediation in one or more subjects will decrease from 55% in 2020 to 28% by 2030.</p>

	<p>across existing data systems and equal access and support (including funding) for implementation across districts.</p> <p>10. Establish metrics to track and periodically report on student remediation and acceleration and ensure those data are used to inform classroom practice.</p>	
--	--	--

Priority: Strengthen, retain, expand, and diversify the state's education professionals

Teachers and school leaders are the bedrock of all education systems. Unfortunately, Tennessee is struggling with teacher shortages across all grades, subject areas, and geographies, and many students lack access to high-quality teachers. Additionally, the demographics of the student population in Tennessee do not match those of the teacher workforce, a challenge when research shows the positive impact on student achievement of having teachers who share racial identities.¹¹ While Tennessee public schools serve 37% students of color, only 13% of educators identify as people of color, a substantial gap.¹² The following recommendations build on the existing work of policymakers to strengthen, retain, expand, and diversify Tennessee's education workforce.

Priority	Recommendations	Success Metric(s)
Strengthen, retain, expand, and diversify the state's education professionals.	<p>11. Strengthen the classroom-based clinical practice for all teacher candidates across all preparation pathways to include components of high-quality, research-based clinical experiences.</p> <p>12. Strengthen the curriculum in educator preparation programs for both teachers and leaders to ensure they have the knowledge and skills to meet students' diverse academic and well-being needs.</p> <p>13. Create or expand high-quality, research-based, state-facilitated professional development opportunities to support teachers in using data to inform their instruction and meet the needs of individual students.</p> <p>14. Increase educator compensation with the intent of elevating the profession and increasing competitiveness in Tennessee's educator labor market.</p> <p>15. Expand and strengthen the existing Minority Teaching Fellows Program.</p> <p>16. Provide technical assistance to districts, in particular rural districts, to establish partnerships with local educator preparation programs to create local Grow Your Own (GYO) programs.</p> <p>17. Create a strong evaluation plan for Grow Your Own programs to ensure these programs result in high-quality educators being placed in Tennessee's classrooms.</p> <p>18. Incentivize postsecondary institutions to work with</p>	<p>By 2030, Tennessee will provide the majority of students with effective teachers. Each district's evaluation composite will reflect an overall effectiveness level of 3, 4, or 5.</p> <p>By 2030, at the district level, the percentage of educators who identify as people of color will be no more than 5% below the percentage of students who identify as people of color (currently the gap is 24% statewide).</p>

	<p>their partner districts to cultivate new teacher pipeline programs (see SB 2017).</p> <p>19. Create new state-operated financial incentive programs for highly effective teachers and leaders.</p> <p>20. NEW: Increase curriculum-based professional development to support implementation of new materials.</p> <p>21. NEW: Reinstate statewide financial support for hiring and retention bonuses for teachers in hard-to-staff positions and low-performing schools.</p> <p>22. NEW: Direct TDOE, THEC, and Student Assistance Corporation to better communicate loan forgiveness and fellowship opportunities on their websites.</p> <p>23. NEW: Update the data collection process and guidance around differentiated pay.</p> <p>24. NEW: Increase alternatives for retirement options for educators.</p>	
--	--	--

In the 2022 legislative session, the General Assembly made progress toward implementing these recommendations through the following action:

Bill Number	Bill Summary
SB 2017 (Pub. Ch. 760)	Permits state colleges or universities to establish a teacher training program (PK-12) in any county with any local board of education.
	Addresses recommendation #18

Priority: Equip schools and districts to address students' well-being

One of the most detrimental and well-documented effects of the pandemic has been on students' well-being, including their mental, emotional, social, and behavioral health.¹³ A robust body of research shows that student well-being is essential for academic success.¹⁴ The [Year 2 report](#) describes the multitude of policies, programs, and initiatives that have been implemented before and after the pandemic began. Despite this work and the wide-scale attention on student well-being, there is more work needed to improve students' mental, emotional, social, and behavioral health. The recommendations below will equip schools and school staff with the resources and knowledge to improve students' well-being.

Priority	Recommendations	Success Metric(s)
Equip schools and districts to address students' well-being.	<p>25. Incentivize the expansion of existing, and the development of new, high-quality programs to support students' well-being.</p> <p>26. Provide professional development to equip all staff to recognize students' well-being needs, especially adverse childhood experiences (ACEs), and know when and where to refer students for more support.</p>	By 2030, all schools will have a chronic absenteeism rate of less than 10% with no significant gaps by student subgroups.

	<p>27. Fully fund school-based nurses, counselors, and social workers in line with Basic Education Program Review Committee 2021 recommendations.</p> <p>28. Incentivize partnerships between education systems and existing mental and behavioral support systems to help educators and community members understand and leverage existing resources.</p>	
--	--	--

Modernize Tennessee's Education System for the Future

Before the pandemic began, Tennessee's education system struggled to produce graduates with the knowledge and skills needed to address the state's workforce needs. Tennessee's labor market is expected to produce 356,000 jobs during the next decade. More than half (53%) of these jobs will require workers with some postsecondary education or training, which far exceeds the state's percentage of working age citizens with a postsecondary credential.¹⁵

The pandemic has made this situation far worse. For example, the **Southern Regional Education Board** estimates the pandemic has accelerated the process of automation by five years. The industries most threatened by automation include food preparation and serving, sales, production occupations, office and administrative occupations, and transportation and material moving, all of which tend to employ citizens with the lowest education levels: women, people of color, and workers who are both very young adults and older, more experienced workers (ages 16-23 and 56-74).¹⁶

Lawmakers must enact bold, innovative, and far-reaching legislation to redesign the high school experience, reshape postsecondary education, and strengthen the alignment between education systems and industry. These efforts, along with sustained innovation in all sectors, will jumpstart the modernizing of Tennessee's education system for the future.

Priority: Optimize capacity for flexible, high-quality school options

The pandemic has shown that policymakers must do more to ensure students have access to a variety of high-quality educational options, both virtually and in-person. Options are important not only to address crises, but to provide flexibility and innovation to meet a range of student needs and to best support every student's success. Leveraging technology to maximize students' opportunities to learn requires that all students have access to devices and fast, reliable internet service. It also requires that educational systems have the ability to adapt and deliver best-in-class instruction in a variety of modes, including virtually. The recommendations below provide several avenues for improving students' access to high-quality learning options, many of which harness the power of technology.

Priority	Recommendations	Success Metric(s)
Optimize capacity for flexible, high-quality school options.	<p>29. Rigorously evaluate and hold current statewide internet infrastructure initiatives and future investments accountable to ensure goals and outcomes are met.</p> <p>30. Incentivize the coordination and innovation of</p>	By 2025, 100% of students will have access to a device (other than a cell phone) that is

	<p>universal broadband access.</p> <p>31. Require districts to maintain infrastructure, including devices, integrated technology platforms, and connectivity solutions, to seamlessly transition modes of instruction, and provide ongoing support and state funding.</p> <p>32. Require periodic virtual “drills” both to ensure schools, students, and families can move seamlessly between virtual and in-person delivery modes and to identify and address infrastructure-related challenges (see HB 1964).</p> <p>33. Hold online schools receiving public funding accountable through existing school accountability structures.</p> <p>34. Enjoin educator preparation programs to incorporate best practices for multiple modes of delivery, including remote instruction, into their instruction and field experiences for all teachers (see HB 1964).</p> <p>35. Provide ongoing professional development to k-12 educators to develop and strengthen remote instruction skills.</p> <p>36. Require that all curricula purchased by districts have an integrated technology-based capability and that districts establish and/or maintain the infrastructure and training required to fully leverage curricular resources across modes, allowing districts to seamlessly switch between delivery modes as necessary.</p> <p>37. Clarify how enrollment, admissions, and financial aid policies classify graduates of virtual schools, then communicate with students and families about the impact attending a virtual school has on eligibility and access.</p> <p>38. NEW: Develop common definitions of high-quality k-12 curriculum and objective rubrics to evaluate materials.</p> <p>39. NEW: Encourage districts to use the highest-rated k-12 curriculum materials</p> <p>40. NEW: Change current law to prioritize admittance for low-income students seeking open enrollment.</p> <p>41. NEW: Explore models that could enable the provision of transportation to students.</p> <p>42. NEW: Establish common open enrollment windows and application processes for all schools and districts, and move toward common enrollment systems at the district level by 2030.</p> <p>43. NEW: Fund established charter school facilities on a per-student basis at an equitable level relative to other types of public schools located within the</p>	<p>connected to high-speed internet.</p>
--	--	--

	<p>same school district.</p> <p>44. NEW: Strengthen charter school accountability by requiring charter school contracts to specify authorizer roles, powers, and responsibilities.</p> <p>45. NEW: Consider amending Tennessee's current homeschool/microschool/learning pod law to protect at-risk students by requiring providers contracted by parents to complete background checks and providing a system that flags providers with a history of abuse and/or neglect.</p> <p>46. NEW: Require OREA to study Tennessee's homeschool, microschools, and learning pods current landscape. For each, evaluate current status and standards, and assess implications of these trends on postsecondary participation.</p> <p>47. NEW: Ask TDOE to initiate a study to determine (a) which student populations (e.g., special education, English learners, students with disabilities) lack access to supplemental learning options, (b) what supplemental learning options are effective, and (c) an assessment of schools and parents representing those student groups to determine what program design features would best enable access.</p> <p>48. NEW: In public accountability reporting (school report cards, websites, etc.), include additional contextual information related to school quality and success, including well-being. Examples of other potential indicators include suspension or expulsion rates; ratings of school safety; access to effective career guidance and counseling; or teacher and school leader attrition, retention, and mobility.</p>	
--	---	--

In the 2022 legislative session, the General Assembly made progress toward implementing these recommendations through the following action:

Bill Number	Bill Summary
HB 1964 (Pub. Ch. 936)	<p>Requires at-least annual LEA virtual learning drills; requires EPPs to provide instruction on "effective strategies for virtual instruction;" requires TDOE to review teacher training programs.</p> <p><i>Addresses recommendations #32 and #34</i></p>

Priority: Redesign high school to ensure students have access to flexible pathways to college and career

A key to modernizing Tennessee's education system is redesigning the high school experience, which means providing students with multiple pathways to graduation; building strong

partnerships between high schools, postsecondary institutions, and industry; and offering students a wide range of opportunities to gain academic and career-related skills inside and outside of school. Despite the existence of a range of programs and initiatives in Tennessee already, many remain underutilized. Most students in Tennessee progress through high school in the traditional ways just as their parents did. The following recommendations focus on restructuring high school so all students are afforded rigorous and relevant preparation for success in whatever postsecondary pathway they pursue.

Priority	Recommendations	Success Metric(s)
Redesign high school to ensure students have access to flexible pathways to college and career.	<p>49. Evolve all districts to offer multiple pathways toward postsecondary credentials and degrees, including through industry certification programs, microcredentials, Tennessee Colleges of Applied Technology (TCATs), community colleges, four-year institutions, and other opportunities, with integration to allow students to move among pathways if one isn't a good fit, and evolve funding streams to mitigate disincentives for k-12 and postsecondary systems to enable flexibility for students (see SB 2531 and HB 2300).</p> <p>50. Ensure every high school student has the opportunity to attend a TCAT or to substantively complete sufficient early postsecondary coursework toward an institution or industry credential while in high school (see SB 2370).</p> <p>51. Fully fund dual enrollment courses for high school juniors and seniors and expand dual enrollment courses to include qualified freshmen and sophomores.</p> <p>52. <i>Require districts and provide funding</i> to support students in accessing a meaningful senior-year capstone experience such as an apprenticeship, a co-op, an internship, or another industry- or work-based learning (WBL) experience, including opportunities to earn both course credit and wages.</p> <p>53. Move to an hours-per-year minimum to give districts flexibility over their calendars, with some guardrails to ensure districts maximize quality instructional time for students.</p> <p>54. Expand opportunities for students to demonstrate proficiency at their own pace:</p> <ul style="list-style-type: none"> ○ Create a high school equivalent to the College Level Examination Program (CLEP) test to allow students to show proficiency in subjects at the secondary level for the necessary credits while altering the Basic Education Program to eliminate disincentives for districts for early graduation. ○ Conduct research to identify challenges with 	By 2030, the percentage of high schoolers that demonstrate readiness for college and careers on Tennessee's Ready Graduate indicator will double from 41% to 82%, with no gaps by race/ethnicity, income, disability, status as an English learner, or geographic locale.

	<p>the Move on When Ready Act and develop and implement a plan to strengthen it.</p> <ul style="list-style-type: none"> o Leverage best practices from the Governor's Investment in Vocational Education (GIVE) Act to create scalable work-based learning and apprenticeship models statewide. <p>55. Pilot competency-based delivery models in high school to identify existing models and scalable best practices.</p> <p>56. Incentivize the expansion of existing mentoring programs to support students in exploring and aligning their career goals and postsecondary pathways.</p> <p>57. NEW: Adopt and implement a program in collaboration with industry and TCATs that includes career and postsecondary planning and operates after school, during the summer, or during school breaks.</p> <p>58. NEW: Partner with nonprofit organizations to provide postsecondary transition services to students.</p> <p>59. NEW: Strengthen the individualized learning plan <u>(not to be confused with an individualized educational program or IEP)</u> process to include deliberate postsecondary and career planning aspects beginning no later than sixth grade.</p>	
--	--	--

In the 2022 legislative session, the General Assembly made progress toward implementing these recommendations through the following actions:

Bill Number	Bill Summary
SB 2531 (Pub. Ch. 794)	<p>Develop and implement a program to permit students to be dual enrolled in a two-year and four-year institution no later than fall 2024.</p> <p><i>Addresses recommendation #49</i></p>
SB 2370 (Pub. Ch. 884)	<p>Expand TCAT access by 2023-24; encourages TBR to create a TCAT for each county.</p> <p><i>Addresses recommendation #50</i></p>
HB 2300 (Pub Ch. 943)	<p>High school students graduating early are to be counted as enrolled (LEA) for accounting purposes through the school year's conclusion.</p> <p><i>Addresses recommendation #49</i></p>

Priority: Streamline postsecondary systems to facilitate lifelong learning

According to the National Skills Coalition, 56% of jobs in Tennessee need workers with “middle skills,” which requires education beyond high school but not a 4-year degree. However, only 49% of Tennessee workers have these middle skills.¹⁷ This shortage of skilled workers in Tennessee is making it difficult for employers to fill open positions. To address this gap, the Commission recommends streamlining systems so learners of all ages have access to a variety of postsecondary opportunities that equip them with the skills necessary to secure employment and progress in their career. Equally important, the Commission’s recommendations focus on redesigning postsecondary systems to align with the state’s workforce needs and on ensuring these systems can easily adapt to the inevitable evolution of the state’s economy.

Priority	Recommendations	Success Metric(s)
Streamline postsecondary systems to facilitate lifelong learning.	<ul style="list-style-type: none">60. Develop scalable, nonlinear credentialing pathways across TCAT, community college, and university pathways, including on- and off-ramps that are not fixed in a perceived order based on credential type.61. Create an automatic dual admissions option for students entering two-year institutions that are partnering with four-year institutions to facilitate seamless transfer and degree alignment.62. Conduct a full assessment and redesign of Tennessee Transfer Pathways, including clarification of which pathways transfer automatically between institutions without additional requirements or conditions (beyond earning a passing grade in coursework) and those that have additional requirements or conditions attached to transferability, and incentivize four-year institutions to partner with two-year institutions and TCATs in order to advance Transfer Pathways.63. Expand the reach of TN Reconnect to accommodate additional alternative pathways and to reduce the eligibility gap between HOPE/TN Promise aid for traditional students and programs for independent adult learners.64. Expand reverse articulation to include alternative credential pathways.65. Incentivize students to take 15 credit hours per semester rather than 12 to improve on-time completion.66. Pilot competency-based delivery models in higher education to identify existing models and scalable best practices.67. Conduct a full assessment of the state’s financial aid portfolio for alignment with best practices, consistency across programs, and alignment with other state goals and initiatives.	<p>By 2025, 55% of Tennesseans over age 24 will hold a postsecondary degree or certificate.</p> <p>By 2030, 60% of Tennesseans over age 24 will hold a postsecondary degree or certificate.</p>

	<p>68. Create a state grant program to incentivize multistakeholder, multifocused initiatives and policies designed to address students' non-tuition-based needs, such as textbook and inclusive access fees, nontuition fees (auxiliary costs), and other success-inhibiting costs.</p> <p>69. Create a pilot program at a set of community colleges to test the success of alternative scheduling, such as block scheduling or year-round scheduling, in meeting the needs of nontraditional students.</p> <p>70. Develop a comprehensive advising/mentoring initiative not tied explicitly to subpopulations of financial aid recipients.</p> <p>71. Task THEC with developing a workforce-responsive degree program and academic program approval policies at postsecondary institutions.</p> <p>72. Incentivize postsecondary institutions to track the number of degrees leading to jobs in a related field.</p> <p>73. NEW: Recommend a review of TBR and state university system hybrid programs and courses to determine which institutions are offering them, evaluate their value to students and faculty, and identify how the state can best support hybrid learning.</p> <p>74. NEW: Assess previous partnerships between hybrid learning providers and University of Tennessee programs to evaluate how those hybrid programs or courses were received by students, and what lessons could be learned.</p> <p>75. NEW: Identify an established hybrid education online provider to develop a pilot program in partnership with one or more public Tennessee universities and/or colleges, ideally in a high-demand career area.</p>	
--	---	--

Priority: Strengthen alignment across the k-12, postsecondary, and workforce systems

When k-12, postsecondary, and workforce systems are misaligned they create barriers to successful transitions for students. These systems are aligned when policies across state agencies, departments, and institutions do not conflict or duplicate one another and when information is clearly conveyed to students to support informed decision-making and successful transitions into college or a career. The recommendations below build on existing work in the state, including the **Tennessee Pathways** initiative, a partnership between the TDOE and the TBR that supports alignment, enrollment, and success in postsecondary programs.

Priority	Recommendations	Success Metric(s)
Strengthen alignment across the k-12, postsecondary, and workforce systems.	<p>76. Improve access to and use of the existing P20 Data System, while protecting privacy.</p> <p>77. Align incentives across k-12 and postsecondary public funding systems to encourage systems to collaborate, prioritize flexibility for students, maximize student success, and minimize the cost and time to degrees and industry certificates employers are seeking, and remove disincentives for school districts to support students in accelerating high school completion.</p> <p>78. Incentivize the expansion of high-quality mentoring programs systemwide to support efforts related to student well-being, high school progression, and success in postsecondary education.</p> <p>79. NEW: Strongly encourage institutions to offer a semester-long or year-long “first year experience-” type course or program to support students as they transition to postsecondary and career.</p> <p>80. NEW: Require THEC, TDOE, and the Department of Labor and Workforce Development to align work related to non-degree credentials to avoid duplicating efforts and to ensure youth and adults seeking quality non-degree credentials receive consistent information.</p> <p>81. NEW: Ensure the agencies tasked with tracking non-degree credentials are collecting and publishing adequate data including industry trends, outcomes, and individual demographics.</p> <p>82. NEW: Ensure the agencies tasked with overseeing non-degree credentials develop partnerships with organizations outside of higher education that offer non-degree credentials to align those credentials with credentials recognized within postsecondary systems.</p>	By 2025, Tennessee’s k-12, postsecondary, and workforce systems will be aligned on which agency is accountable for each of the success metrics outlined by ERIC and will have a process in place to track progress towards each metric.

Priority: Incentivize locally led innovation

“Innovation” is one of the most widely used and ill-defined terms in education. One concise definition comes from the New Schools Venture Fund, an organization that invests in education entrepreneurs: a “successful innovation” is a new approach that brings an improved result. Using this definition, innovation has occurred sporadically in districts, schools, and classrooms across the country for several decades, but innovation at the policy level is far less common.¹⁸ One exception is state innovation funds, including the TDOE’s \$1 million Individuals with Disabilities Education Act (IDEA) Innovation Grant program, which provided funding to districts to find new ways to support students with disabilities.¹⁹ Below, the Commission expands that idea through a recommendation focused on creating a cross-system innovation hub for the state of Tennessee.

Priority	Recommendations	Success Metric(s)
Incentivize locally led innovation.	<p>83. <i>Create an innovation hub representing a partnership of education and industry organizations from the public, private, and nonprofit sectors.</i></p> <ul style="list-style-type: none"> ○ NEW: This independent agency will have authority and accountability, and will interact with TDOE, THEC, and the Department of Labor and Workforce Development to focus on educational innovation across the kindergarten to career continuum. ○ NEW: This work will include establishing grant opportunities to encourage entrepreneurs to innovate in support of student success (e.g., postsecondary transitions, early literacy and math). 	[placeholder]

Collectively, the legislature took up six separate bills that addressed six of the recommendations the Commission offered in their [Year 2 report](#). Half of these bills focused on redesigning high school to ensure students have access to flexible pathways to college and career. Lawmakers also addressed three other priorities with one bill each.

- Ensure students master literacy and numeracy skills
- Strengthen, retain, expand, and diversify the state's education professionals
- Optimize capacity for flexible, high-quality school options

It's also worth noting that several of the provisions in the **Tennessee Investment in Student Achievement (TISA) Act** align with the Commission's recommendations. This includes removing the financial disincentive to early graduation (see recommendation #54) and providing the necessary funding to improve nurse, counselor, and social worker ratios (see recommendation #27). Despite the progress legislators have made in 2022, significant work remains. For example, lawmakers still are yet to directly address six of the Commission's priority areas.

- Address learning remediation and acceleration needs
- Equip schools and districts to address students' well-being
- Redesign high school to ensure students have access to flexible pathways to college and career
- Streamline postsecondary systems to facilitate lifelong learning
- Strengthen alignment across the k-12, postsecondary, and workforce systems
- Incentivize locally led innovation

Sustained legislative action is needed over the next several years to address all the recommendations and achieve the Commission's vision for Tennesseans.

Conclusion

Education systems in Tennessee currently do not meet the needs of all learners. Right now, we fail to consistently prepare all students for successful participation in a dynamic state economy, or even provide the foundational skills required to be active and contributing citizens to our communities and our democracy.

Less than a third of k-12 students in Tennessee are proficient in **English language arts** and math.²⁰ According to the state's Ready Graduate indicator, less than half of all high school students in Tennessee graduate prepared for college or a career.²¹ Those statistics are even more sobering for the state's most marginalized students. It's also widely acknowledged that students' well-being has been severely impacted by the events of 2020 and throughout the pandemic. Nearly every metric shows that students' emotional health, physical health, and social development has been damaged by the pandemic.²²

The pandemic also showed that public education in Tennessee, at both the k-12 and postsecondary levels, is not designed for the realities of the modern world. The global economy, as well as Tennessee's, is rapidly evolving and increasingly driven by technological advances. For example, the majority of jobs created in the future will require some level of education beyond high school, and the pandemic has only accelerated the automation of many jobs once accessible to those without advanced credentials. However, the disruption to in-person learning caused by the pandemic showed that many schools do not have the technological capability necessary to adapt to the ever-changing world.

The Commission has offered dozens of recommendations designed to address these challenges, and Tennessee legislators have made progress in enacting many of these policies. However, they must not rest until the Commission's vision is fully realized. Yet, this job is not only that of the legislature. Everyone has a part to play, starting with strong implementation from the executive agencies tasked with carrying out the Commission's recommendations. Without strong implementation, the Commission's recommendations will fail to have an impact on students and instead will simply exist as words on a page. These agencies, along with their partners in the senate and house, must also ensure the broader policy environment is coherent and promotes effective intra-agency and cross-system collaboration and coordination.

The future is bright if Tennesseans unite in pursuit of the Commission's vision for the state: Every Tennessean will have high-quality education necessary for life. In that future, every student will reach proficiency in literacy and numeracy. In that future, all students will have their basic well-being needs attended to, setting them up to thrive academically. In that future, all students will have an opportunity to pursue flexible, high-quality postsecondary pathways aligned to their interests and aspirations. In that future, all education systems will be prepared to adapt and innovate in the face of unforeseen challenges. In that future, k-12, postsecondary, and industry will be seamlessly connected through strong, mutually beneficial partnerships. In that future, all students will have a path to economic freedom and upward mobility.

Tennessee's leaders have the power to make this future a reality.

Commented [LG11]: Dolores Gresham feedback:
Clarify/strengthen "everyone," regarding shared accountability.

June 10 discussion.

Proposed revision: "is fully realized. Everyone shares accountability for achieving success for Tennesseans, starting with strong implementation from the executive agencies tasked with carrying out the Commission's recommendations. Schools, leaders, teachers, parents, and even students ultimately share responsibility for putting these policies into practice and achieving successful outcomes."

Acknowledgments

This report relies on data from numerous sources, and the Commission gratefully acknowledges the contributions made by the State Board of Education, the Tennessee Department of Education, the Tennessee Higher Education Commission, and others. In addition, we are grateful to the dozens of individuals who shared their feedback and perspectives on various drafts of the recommendations we put forth in this report. The input we gathered from conversations with stakeholders across a variety of sectors and experiences greatly enhanced the content of our recommendations.

DRAFT

Glossary of Terms and Acronyms

Term	Acronym	Definition
Accelerated Study in Associate Programs	ASAP	City University of New York initiative aimed at increasing graduation rates at colleges. ASAP features two types of alternative scheduling: block and year-round.
Advanced Placement	AP	A College Board program that provides high school students with the opportunity to take college-level courses and earn college credit with qualifying exam scores.
Adverse childhood experiences	ACE	ACEs are potentially traumatic events that occur in a child's life. Examples of ACEs can include experiencing violence, abuse, or neglect, witnessing violence in the home or community, or having a family member attempt or die by suicide. A child's environment can also be an example of an ACE, such as growing up in a home with substance abuse or mental health problems or experiencing parental separation or household members being incarcerated.
American College Testing	ACT	The ACT is a standardized test used for college admissions in the United States.
Articulation agreement		Agreement made between two or more institutions that guarantees that courses completed at one school will be accepted when a student transfers to another school; these agreements are important to support clear credential and degree requirements and pathways and to ensure that students will not "waste" time repeating a course.
Basic Education Program	BEP	The funding formula through which state and corresponding local education dollars are generated and distributed to schools in Tennessee.
Clinical practice/student teaching		10 weeks or more of supervised, full-day experience in a classroom with a highly effective mentor teacher. The teacher and others provide observation and feedback for the teaching candidate engaged in the clinical experience.
College Level Examination Program	CLEP	A group of standardized tests created and administered by the College Board that assess college-level knowledge in 36 subject areas, allowing students to earn college credits without taking college courses.

Competency-based education	CBE	A framework for teaching and assessment of learning that allows students to advance based on demonstrated mastery of individual skills or competencies when ready, in contrast with a traditional model in which students move as a grade-level group or cohort through the same material at the same pace. A “skill” or “competency” would be something like “dividing fractions.” Once a student demonstrates mastery of a skill or competency, they move on to the next skill.
Complete College Tennessee Act	CCTA	This act changes Tennessee’s higher education funding formula to an outcomes-based model that rewards productivity as measured by rates of degree completion, creates a statewide transfer policy between two-year community colleges and four-year universities, and requires the Tennessee Board of Regents and the University of Tennessee systems to establish dual admission and dual enrollment policies.
Credential stacking		A sequence of credentials that accumulate over time, allowing an individual to move along a career pathway or up a career ladder.
Chronic absenteeism		Tennessee defines chronic absenteeism “as a student missing 10 percent or more of the days the student is enrolled for any reason, including excused absences and out-of-school suspensions.” ²³
Differentiated pay		Compensation that is “based on factors other than years of experience and education credentials.” ²⁴
Drive to 55		Tennessee’s statewide postsecondary credential attainment goal, which aims to increase the number of Tennesseans with a postsecondary credential to 55% by the year 2025.
Early postsecondary opportunities	EPSO	Learning opportunities where students can earn postsecondary credit or credentials while in high school (e.g., dual/concurrent enrollment programs, AP courses, industry-recognized certificates).
Early warning data system	EWDS	A system that tracks student progress over time on a variety of metrics and can help ensure students in need of additional support are identified early and provided the resources they need to be successful.
English language arts	ELA	Reading, writing, and comprehension of the English language.

English language learners	ELL	The term English language learners “refers to individuals who have limited proficiency in the English language.” “The term ‘English learner’ or EL is also used interchangeably with ELL.” ²⁵
Every Student Succeeds Act	ESSA	The most recent and current iteration of the Elementary and Secondary Education Act of 1965 passed in 2015, which governs k-12 public education policy in the United States.
Evidence-based (or research-based)		An approach to education (and other fields) that emphasizes the application of the findings from the best available current research. Practices and procedures are then based on what the evidence supports as best.
Free Application for Federal Student Aid	FAFSA	An application used by the Federal government, states, and postsecondary institutions for gathering financial information on students to determine what loans or grants they qualify for.
Financial Aid Simplification for Tennesseans Act	FAST Act	The act affects over a dozen financial aid programs, adds to the powers of the THEC, and clarifies the purpose and structure of the Tennessee Student Assistance Corporation (TSAC), among other minor changes.
Gaining Early Awareness and Readiness for Undergraduate Programs	GEAR UP	A federal grant program for states and partnerships to increase the number of low-income students matriculating into in-state public universities.
Governor’s Investment in Vocational Education Act	GIVE Act	Designed to foster long-term regional partnerships between TCATs, community colleges, industry, economic development/workforce agencies, and k-12 to identify and address skills gaps in the local workforce.
Grow Your Own	GYO	Teacher preparation strategy focused on developing and retaining teachers from a school’s or district’s local community.
Hybrid programs		Hybrid programs generally combine in-person instruction within a traditional school setting and at-home (or another alternative site) instruction, where students attend in-person at school on designated days of the week, benefitting from direct instruction and classroom interaction, and complete assignments at home on the remaining days of the week. During their at-home days, students engage in a variety of education experiences, including self-directed online modules, online discussions

		with their peers or instructor, and online small group collaboration.
Individualized learning plan	ILP	A document and set of activities designed to help students define their postsecondary goals and successfully transition to college or a career.
Integrated technology		The use of technology resources (e.g., computers, smartphones, tablets, digital cameras, social media, software applications) in daily classroom practices and in the management of a school.
International Baccalaureate	IB	An international education program and curriculum made up of three core elements and six subject groups. Students who successfully complete the program can earn advanced standing, course credit, scholarships, and other admissions-related benefits at many universities.
Last dollar		Last-dollar programs cover the educational costs left after all other public funding or grants have been awarded and usually apply only to tuition and mandatory fees (but not books, meal plans, housing, or other expenses).
Learning acceleration		A learning strategy where teachers deliver grade-level instruction to students while providing supports or scaffolds as needed.
Learning pods		Learning pods generally enroll fewer than 12 students. They became popular during the pandemic as a way for parents to supplement students' remote learning, typically offered by a brick-and-mortar school, with small group, in-person learning provided by a parent or hired instructor.
Local education agency	LEA	A public board of education or other public authority within a state that maintains administrative control of public elementary or secondary schools in a city, county, township, school district, or other political subdivision of a state. School districts and county offices of education are both LEAs.
Microschools		Definitions vary widely, but microschools are typically "designed to be small" (i.e., fewer than 150 students) and commonly have multiage classrooms, use blended learning and technology, and prioritize student-led learning. ²⁶
MiFi		A portable wireless device that connects to a mobile phone network to create a mini broadband hotspot.

Multi-Tiered System of Supports	MTSS	A framework that helps educators provide academic and behavioral strategies for students with various needs. MTSS grew out of the integration of two other intervention-based frameworks: Response to Intervention (RtI) and PBIS .
<u>National Assessment of Educational Progress</u>	<u>NAEP</u>	<u>The National Assessment of Educational Progress (NAEP), often referred to as The Nation's Report Card, is "the largest nationally representative and continuing assessment of what students in public and private schools in the United States know and are able to do in various subjects."</u>
National Council of Teachers of Mathematics	NCTM	Founded in 1920, the NCTM is the world's leading mathematics education organization and advocates for high-quality mathematics teaching and learning for each and every student.
National Research Council	NRC	The NRC is the operating arm of the United States National Academies of Sciences, Engineering, and Medicine and is overseen by a governing board that consists of councilors from each of the three academies. The national academies are private, nonprofit institutions that provide expert advice on challenges facing the nation and world.
Non-degree credentials		The Rutgers Education and Employment Research Center, identifies six categories of non-degree credentials: subbaccalaureate for-credit certificates, non-credit certificates, industry certifications, occupational or professional licensure, apprenticeships, and badges/microcredentials. ²⁷
Nontraditional students		Broadly defined term encompassing all students who do not fall into the traditional pattern of entering postsecondary education full time the fall after their high school graduation. Nontraditional students can be those who enroll one or more years post-high school, those who attend part time, those with dependent children or who provide care for relatives, those working full time, those with an alternative high school completion certificate, those returning to college after a gap of several years, or those beginning college at age 25 or older.
Office of Research and Education Accountability	OREA	Tennessee office that provides the TN General Assembly with objective and accurate research, evaluation, and analysis.

Open enrollment		Open enrollment policies allow students to attend a traditional public school that is different from the one assigned to them by their local education agency (LEA) based on their residence. There are two types of open enrollment: intradistrict open enrollment allows students to transfer to another public school within their home LEA while interdistrict open enrollment allows students to transfer to another public school in a different LEA within the state.
Outcomes-based funding model	OBF	A financing strategy that allocates a portion of education funding based on schools' achievement on specific student outcomes.
P20		P20 refers to preschool through higher education (up to 20 years of schooling).
P20 Connect TN Data System		System that provides a full view of students across various data points and multiple systems, including k-12, higher education, and workforce development.
Positive Behavioral Interventions and Supports	PBIS	PBIS is an evidence-based, three-tiered framework to improve and integrate all of the data, systems, and practices affecting student outcomes every day.
Ready Graduate		An indicator of college and career readiness for Tennessee high school graduates. A Ready Graduate must meet one of the following four criteria: (1) score a benchmark on the ACT or SAT; (2) complete four EPSOs ; (3) complete two EPSOs and earn an industry credential; or (4) complete two EPSOs and demonstrate military readiness.
Remediation		Remediating or reteaching (teaching again) material that students did not adequately learn at their previous education level.
Reverse articulation		Currently, Tennessee has a Reverse Transfer Program for students transferring from a community college to a four-year institution. They typically have many of the credits required for an associate's degree. Reverse articulation allows them to apply new credits earned at the four-year institution to previous credits earned to receive an associate's degree. Should the student not achieve a bachelor's degree, they will at least hold a degree representative of the work they completed.

Seamless Alignment and Integrated Learning Support	SAILS	SAILS targets students that have not achieved college readiness benchmarks by introducing the college developmental curriculum into high schools' senior year. Developed by k-12 teachers and faculty at Chattanooga State Community College, SAILS embeds the TBR Learning Support competencies into high schools' senior-year math courses, utilizing a blended-learning model.
Southern Regional Education Board	SREB	The SREB works with states to improve public education at every level, from early childhood through doctoral education. They are a nonpartisan, nonprofit organization working with institutions, educators, and policymakers.
Supplemental Nutrition Assistance Program	SNAP	SNAP provides nutrition benefits to supplement the food budget of needy families so they can purchase healthy food and move toward self-sufficiency. Eligibility is determined by state-specific requirements, including resource and income limits.
Temporary Assistance for Needy Families	TANF	The TANF program, which is time-limited, assists families with children when the parents or other relatives cannot provide for the family's basic needs. The Federal government provides grants to states to run the TANF program.
Tennessee Accelerating Literacy and Learning Corps	TN ALL Corps	Tutoring model that will span 2020-2023 and will provide tutor training and certification, grade-level specific content, high-dosage tutoring, significant guidance and tutoring resources, and a directory of TDOE-reviewed providers.
Tennessee Board of Regents	TBR	The TBR establishes, governs, manages, and controls the state university and community college system of Tennessee. It is governed by 19 board members and meets, at a minimum, quarterly.
Tennessee Colleges of Applied Technology	TCAT	Tennessee has 27 TCATs. They are the state's premier providers of state-of-the-art technical training for workers to obtain the technical skills and professional training necessary for advancement in today's competitive job market.
Tennessee Comprehensive Assessment Program	TCAP	TCAP has been the state's testing program since 1988, and it includes TNReady assessments in math, English language arts, social studies, and science, as well as alternative assessments, like the Multi-State Alternate Assessment (MSAA) and TCAP-Alt, for students with special needs.

Tennessee Department of Education	TDOE	Tennessee enrolls approximately 998,000 students and is divided into 147 districts with both significant urban and rural populations. These students are overseen by the TDOE, which is dedicated to the goal of dramatically improving student achievement and committed to the belief that children from all backgrounds can succeed when given the opportunities they deserve.
<u>Tennessee Department of Labor and Workforce Development</u>		<u>This department has a mission, by working as a team, to promote development in the workforce and the economy. The department also works to improve workplace safety and health across Tennessee.</u>
Tennessee Higher Education Commission	THEC	Formed in 1967, the THEC is the state's higher education coordinating board and is responsible for an array of duties, including administration of outcomes-based funding formulas, approval of new degree programs, development of a higher-ed state master plan, providing postsecondary data analysis, and more.
Tennessee Investment in Student Achievement Act	TISA	<u>The Tennessee Investment in Student Achievement Act passed the Tennessee legislature on April 28, 2022. It is a new, student-based funding formula designed to provide every Tennessee student with the funding needed to meet individual educational goals.</u>
Tennessee Pathways		A set of programs and initiatives designed to create alignment between k-12, postsecondary education, and employers so that students have a clear and guided pathway to gain the knowledge and experience needed to move seamlessly into the workforce.
Tennessee Transfer Pathways		A program allowing students to complete a two-year program at a community college and apply those credits toward a four-year degree program at a college/university.
Tennessee Value-Added Assessment System	TVAAS	TVAAS measures student growth year over year, regardless of whether the student is proficient on the state assessment. In calculating a TVAAS score, a student's performance is compared to the performance of his or her peers who have performed similarly on past assessments.
TN Reconnect		A program that supports adult learners pursuing a postsecondary degree.

Virtual drills		Virtual drills are scheduled practice sessions on delivering and receiving virtual/online instruction. The purpose of these drills is to ensure that future disruptions to public education will be met by students, families, and teachers prepared to “go virtual” and continue teaching and learning until in-person education can resume.
Whole-child development		A focus on all aspects of a child's well-being, including social-emotional, physical, creative, and cognitive capacities.
Work-based learning	WBL	An educational strategy that offers learners an opportunity to reinforce and deepen their classroom learning, explore future career fields, and demonstrate their skills in an authentic, real-world setting such as an internship or apprenticeship.

Endnotes

- ¹ The Nation's Report Card, *State Performance Compared to the Nation*. Retrieved from <https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=RED&sj=AL&sfj=NP&st=MN&year=2019R3>
- ² THEC, *Tennessee Higher Education Fact Book 2020-2021*, Retrieved from https://www.tn.gov/content/dam/tn/thec/bureau/research/other-research/factbook/Fact%20Book%202020-2021_Full%20Draft_Suppressed.pdf
- ³ https://www.scribd.com/document/498386327/2-5-21-III-a-Educator-Diversity-Policy-5-700-Cover-Sheet#from_embed.
- ⁴ TDOE, *State of Tennessee, Chronically Out of School*, <https://reportcard.tnedu.gov/state/0/attendance>
- ⁵ Tennessee Comptroller of the Treasury, Office of Research and Education Accountability, *Tennessee Promise: 2022 Update*, 2022. <https://comptroller.tn.gov/content/dam/cot/orea/advanced-search/2022/TNPromise2022Update.pdf>
- ⁶ TDOE, *Spring 2021 TCAP Release*.
- ⁷ TDOE, *Spring 2021 TCAP Release*.
- ⁸ American Institutes for Research, "Reading and Literacy," Education, AIR, last modified 2021, <https://www.air.org/work/education/reading-and-literacy>; Andreas Schleicher, "Why Is Numeracy Important?" National Numeracy, last modified 2021, <https://www.nationalnumeracy.org.uk/about/what-numeracy/why-numeracy-important>.
- ⁹ Leila Fiester, *Early Warning! Why Reading by the End of Third Grade Matters* (Baltimore, Annie E. Casey Foundation, 2010), https://assets.aecf.org/ml/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf.
- ¹⁰ THEC, *Tennessee Higher Education Fact Book 2020-2021*.
- ¹¹ Seth Gershenson, Stephen B. Holt, and Nicholas W. Papageorge, "Who Believes in Me? The Effect of Student–Teacher Demographic Match on Teacher Expectations," *Economics of Education Review* 52 (2016): 209–24, <https://www.sciencedirect.com/science/article/abs/pii/S0272775715300959>.
- ¹² TDOE, *Teacher and Administrator Racial and Ethnic Diversity in Tennessee*, 2018.
- ¹³ Jad A. Elharake, Faris Akbar, Amy A. Malik, Walter Gilliam, and Saad B. Omer, "Mental Health Impact of COVID-19 among Children and College Students: A Systematic Review," *Child Psychiatry & Human Development*, Advance online publication (2021)
- ¹⁴ CASEL, "What Does the Research Say?" Fundamentals of SEL, CASEL, last modified 2021, <https://casel.org/fundamentals-of-sel/what-does-the-research-say/>.
- ¹⁵ National Skills Coalition, *Skills Mismatch* (Washington, DC: National Skills Coalition, 2020), <https://www.nationalskillscoalition.org/wp-content/uploads/2020/12/TN-Skills-Mismatch-Fact-Sheet-2020.pdf>
- ¹⁶ Southern Regional Education Board, "Tennessee: 2020 State Workforce Outlook," SREB, last modified November 2020, <https://www.sreb.org/publication/tennessee-1>.
- ¹⁷ National Skills Coalition, *Skills Mismatch* (Washington, DC: National Skills Coalition, 2020), <https://www.nationalskillscoalition.org/wp-content/uploads/2020/12/TN-Skills-Mismatch-Fact-Sheet-2020.pdf>.
- ¹⁸ Kim Smith, *Innovation in Public Education: Problems and Opportunities* (Oakland, CA: Newschools Venture Fund, 2009), <https://www.newschools.org/wp-content/uploads/2016/01/innovation-in-education.pdf>.
- ¹⁹ Victoria Robinson, "TDOE Announces \$1 Million IDEA Innovation Grant," news release, June 12, 2020, <https://www.tn.gov/education/news/2020/6/12/t DOE-announces--1-million-idea-innovation-grant-.html>.
- ²⁰ TDOE academic achievement data for the class of 2021: <https://reportcard.tnedu.gov/state/0/achievement>
- ²¹ TDOE Ready Graduate data for the class of 2020: <https://reportcard.tnedu.gov/state/0/ready-graduate>
- ²² Jad A. Elharake, Faris Akbar, Amy A. Malik, Walter Gilliam, and Saad B. Omer, "Mental Health Impact of COVID-19 among Children and College Students: A Systematic Review," *Child Psychiatry & Human Development*, Advance online publication (2021)
- ²³ TDOE, *Chronic Absenteeism*, Retrieved from <https://www.tn.gov/education/student-support/chronic-absenteeism.html>
- ²⁴ Tennessee Comptroller of the Treasury. "Legislative Brief, Differentiated Pay in Tennessee School Districts." (2019). Retrieved from <https://comptroller.tn.gov/content/dam/cot/orea/advanced-search/2019/DifferentiatedPaywebsite.pdf>
- ²⁵ <https://rossieronline.usc.edu/blog/english-language-learners/>
- ²⁶ Juliet Squire, Melissa Steel King, and Justin Trinidad. "Working Toward Equitable Access and Affordability: How Private Schools and Microschools Seek to Serve Middle- and Low-Income Students." https://bellwethereducation.org/sites/default/files/Working%20Toward%20Equitable%20Access%20and%20Affordability_Bellwether.pdf
- ²⁷ Michelle Van Noy, Heather McKay, and Suzanne Michael. "Non-Degree Credential Quality: A Conceptual Framework to Guide Measurement." (2019). Retrieved from: https://smrl.rutgers.edu/sites/smrlr/files/images/Centers/rutgerseerc_ndcquality_framework_full_paper_final.pdf